

Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics 1435 Win Hentschel Blvd. Suite B105 West Lafayette, IN 47906-4145 (765) 494-8371

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CROP REPORT FOR WEEK ENDING OCTOBER 24

AGRICULTURAL SUMMARY

Rain slowed field activities in most areas of the state during the week, according to Indiana Agricultural Statistics. Corn and soybean harvest continued to make some progress in fields where soils were dry enough to support heavy equipment. Corn harvest is 6 days ahead of the average pace. Soybean harvest is about 5 days ahead of the average pace. Many farmers were visiting local FSA offices to fill out forms for LDP'S. Fall tillage continued to take place in some fields. The rain helped winter wheat emergence and growth.

FIELD CROPS REPORT

There were 2.8 days suitable for fieldwork. Virtually all of the corn acreage is mature (safe from frost). Seventy-two percent of the corn acreage is harvested compared with 47 percent last year and 60 percent for the average. By area, 65 percent of the corn acreage is harvested in the north, 75 percent in the central region and 83 percent in the south. Moisture content of harvested corn is averaging about 17 percent. Corn condition is rated 84 percent good to excellent.

Virtually all of the soybean acreage is **mature** except for some late planted and double cropped soybean fields. Eighty-seven percent of the soybean acreage is **harvested** compared with 78 percent last year and 81 percent for the average. By area, 88 percent of the soybean acreage is harvested in the north, 92 percent in the central region and 74 percent in the south. **Moisture** content of harvested soybeans is averaging about 11.5 percent.

Seventy-six percent of the winter wheat acreage is **planted** compared with 80 percent last year and 77 percent for the average pace. By area, 92 percent of the winter wheat acreage is planted in the north, 77 percent in the central region and 62 percent in the south. Forty-four percent of the winter wheat acreage is **emerged** compared with 47 percent last year and 47 percent for the average pace.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 2 percent excellent, 30 percent good, 40 percent fair, 22 percent poor and 6 percent very poor. Recent rain has helped improve pastures in most areas of the state. Livestock are in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg				
	Percent							
Corn Harvested	72	60	47	60				
Soybeans Harvested	87	82	78	81				
Winter Wheat Planted	76	66	80	77				
Winter Wheat Emerged	44	21	47	47				

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel- lent		
	Percent						
Corn	2	3	11	46	38		
Wheat	1	3	38	51	7		
Pasture	6	22	40	30	2		

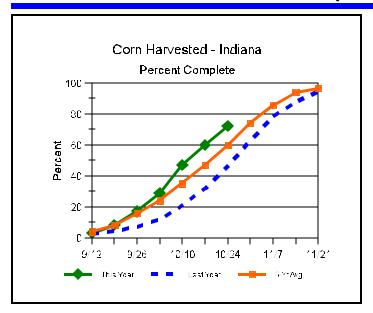
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

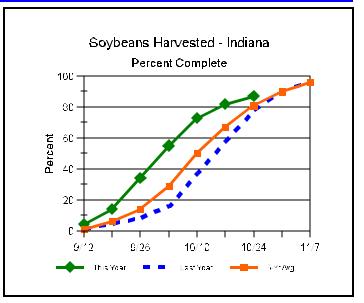
	This Week	Last Week	Last Year				
		Percent					
Topsoil							
Very Short	1	6	0				
Short	11	31	7				
Adequate	72	58	85				
Surplus	16	5	8				
Subsoil							
Very Short	4	15	4				
Short	26	38	10				
Adequate	66	46	81				
Surplus	4	1	5				
Days Suitable	2.8	4.2	5.8				

CONTACT INFORMATION

- --Greg Preston, Director
- --Bud Bever, Agricultural Statistician E-Mail Address: nass-in@nass.usda.gov http://www.nass.usda.gov/in/index.htm

Crop Progress





Other Agricultural Comments And News

Proper Grain Storage Part II: Insect Pest Management Practices

This article is a continuation in a series about proper grain storage practices. Part I appeared on page 4 of the September 27, 2004 Indiana Crop & Weather Report, Vol. 54, No. 39

Sanitation in and around stored grain facilities is the most effective and economical management practice to prevent insect infestations in stored grain. Prior to storing grain, all surfaces that may come in contact with the newly harvested grain should be cleaned. In addition, storage bins with false floors and aeration ducts may need to be fumigated or treated with diatomaceous earth. The grain and dust that accumulate in these areas are excellent sources of insect infestations. If fumigation is selected as the optimal procedure, seek a licensed applicator to do the job. Fumigants are highly toxic to humans and must be applied with proper protective equipment.

After the storage area is cleaned, an approved residual insecticide should be applied on both the outside and inside bin walls and on floors. As the grain is binned, preventative measures include applying a protectant if the grain will be in storage for more than a year. Grain protectants kill insects as they crawl about or feed on the treated grain. However, grain protectants should not be applied to high moisture grain or above 90ÅF because they can lose their effectiveness.

After binning, some grain protectants can be applied as a surface treatment ("top-dress") to protect the grain

from surface feeders such as Indianmeal moth and invading beetles. Legal tolerances can be exceeded if a product is applied both as a grain protectant and top-dress, so the label MUST be read and followed.

Storages should not be overfilled. Furthermore, insecticide treatments, aeration, and fumigation cannot be done effectively when the grain surface is not level. Above 55-60 ÅF the grain should be inspected at least every two weeks for insect activity. Plastic grain probe traps are excellent sampling devices that can help determine insect activity below the grain surface. To prevent stored grain insects, effective measures can be as simple as maintaining grain temperatures below 60 ÅF or above 100 ÅF.

Mold and Mycotoxin Management

Grain spoilage is the result of microorganisms using the nutrients within the grain for their own growth and development. During this process they produce heat and increase the temperature of the surrounding grain, which may result in hot spots. Heat damage significantly reduces grain quality. If environmental conditions in the grain are right, the major storage mold may produce mycotoxins such as aflatoxin, fumonisin, DON, and zearalenone. These may cause serious illness and even death when consumed by livestock or humans. The presence of mold does not mean mycotoxins will be present, but rather that the potential for their development exists given the right

(Continued on Page 4)

Weather Information Table

Week ending Sunday October 24, 2004

-	Past Week Weather Summary Data				Data	Accumulation						
	Station Air					April 1, 2004 thru						
Station						1						
	<u> </u>	empe '	<u>ratu</u>	<u>re</u>	Prec	<u>ip.</u>		Preci	<u>pitatio</u>	n	GDD Ba	ase 50°F
	 Hi	 Lo	 Avg	 DFN	 Total	Days	Soil Temp	 Total	DFN	Days	 Total	DFN
Northwest (1)												
Chalmers_5W	70	30	51	-2	1.56	4	52	32.12	+8.09	67	3024	-170
Valparaiso_AP_I	69	35	50	-2	1.08	3		22.58	-3.93	71	2843	-80
Wanatah	70	27	49	-1	1.08	4	53	24.48	-0.89	79	2611	-162
Wheatfield	71	31	49	+0	1.49	4		39.60	+15.16	79	2750	-79
Winamac	66	33	50	+0	1.21	3	50	31.28	+6.81	84	2879	-40
North Central (2)											
Plymouth	68	31	50	-2	0.69	3		28.64	+3.39	82	2765	-309
South_Bend	67	37	50	-1	0.49	1		24.05	-0.57	80	2951	+70
Young_America	66	33	50	-1	1.22	3		29.45	+5.63	71	3021	+5
Northeast (3)												
Columbia_City	64	32	48	-1	0.86	2	51	26.29	+2.54	82	2765	+17
Fort_Wayne	66	34	50	+0	1.11	2		26.96	+5.17	77	3007	-20
West Central (4)												
Greencastle	68	30	53	+0	2.35	5		26.66	-0.76	75	2970	-463
Perrysville	73	37	53	+3	1.72	5	56	24.31	-1.20	62	3284	+100
Spencer_Ag	68	28	53	+3	2.71	4		31.57	+4.22	80	3203	+0
Terre_Haute_AFB	71	38	56	+3	2.94	4		23.67	-2.11	72	3510	+105
W_Lafayette_6NW	68	33	51	+1	1.22	3	55	25.25	+1.09	57	2988	-26
Central (5)												
Eagle_Creek_AP	68	39	53	+2	1.91	4		22.99	-1.14	73	3417	+46
Greenfield	64	36	51	-1	1.90	4		26.10	-0.36	72	3200	-40
Indianapolis_AP	68	42	53	+2	2.45	5		30.99	+6.86	69	3528	+157
Indianapolis_SE	69	34	51	-1	1.93	4		25.04	+0.29	62	3238	-127
Tipton_Ag	66	33	49	-1	0.95	4	53	25.69	+0.82	76	2913	-2
East Central (6)												
Farmland	65	34	49	-1	1.20	3	45	23.74	-0.06	70	2946	+105
New_Castle	61	31	48	-3	1.16	2		25.42	+0.03	55	2622	-292
Southwest (7)												
Evansville	76	48	61	+8	1.77	2		25.79	+1.29	61	4024	+101
Freelandville	70	36	56	+4	5.10	4		30.13	+4.64	66	3556	+37
Shoals	69	38	57	+5	4.97	5		32.29	+4.75	70	3566	+154
Stendal	74	38	59	+6	4.33	5		30.81	+3.59	64	3817	+132
Vincennes_5NE	70	35	56	+4	3.43	4	54	30.03	+4.54	77	3706	+187
South Central (8)												
Leavenworth	69	36	57	+6	3.51	5		36.54	+8.84	75	3616	+229
Oolitic	67	34	55	+4	6.01	5	56	32.93	+6.39	80	3372	+125
Tell_City	76	40	61	+7	2.70	3		34.81	+7.02	63	4124	+322
Southeast (9)												
Brookville	64	35	52	+2	3.16	4		23.45	-2.09	63	3414	+337
Milan_5NE	64	35	53	+3	3.19	5		32.02	+6.48	101	3323	+246
Scottsburg	69	35	56	+4	5.17	5		39.09	+12.86	69	3442	-61

DFN = Departure From Normal (Using 1961-90 Normals Period).

GDD = Growing Degree Days.

Precipitation (Rainfall or melted snow/ice) in inches.

Precipitation Days = Days with precip of .01 inch or more.

Air Temperatures in Degrees Fahrenheit.

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combination of temperature, moisture content, and storage time. Even more frustrating is the fact that the absence of mold does not guarantee a mycotoxin-free commodity. This is because the growth of the mold may not be extensive enough to cause visible damage, but nevertheless it can still produce toxins. Generally, broken, ground, and dead grain are more vulnerable to fungal attack than whole grain; stored grain dried at high temperatures is more vulnerable to molding than is grain dried at low temperature; and grain stored for long periods of time is more vulnerable than freshly harvested grain. Although molds are diverse in their requirements, all mold growth can be prevented by low moisture, low temperature, and low oxygen environmental conditions.

Summary

Maintaining stored grain quality requires an integrated approach by the stored grain manager that incorporates a number of tools and pesticides to prevent quality deterioration. Relying on a single tool to take care of a problem is an approach of the past that is doomed to fail in the future. Single solutions, especially if they are chemical in nature, are under intense public and regulatory scrutiny and will continue

to be a limited option. Prevention is the only acceptable way to maintain grain quality.

Table 1. Examples of residual insecticides for empty grain bins in Indiana

Diatomaeceous EarthReldan 4E Storcide (does NOT have CODEX MRLs) Tempo SC Ultra

Table 2. Examples of grain protectants approved for application to stored corn in Indiana

Actellic
Diacon II
Diatomeceous Earth type products
(Insecto, Protect It Dryacide)
Malathion 6% grain dust or Malathion 5EC

Linda Mason, Department of Entomology, Purdue University

Dirk Maier, Extension Agricultural Engineer, Purdue University

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